

REMARKS

In the Office Action, claims 1-25 were rejected. Claims 1, 2, 7-11, 14, 15, and 20-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ouellette et al. [U.S. Pat. 5,033,092] in view of Hershey et al. [U.S. Pat. 5,519,692]. Claims 3, 4, 12, and 16-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ouellette et al. in view of Hershey et al. and further in view of Payne [U.S. Pat. 6,040,769]. Claims 5, 6, 13, and 18-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ouellette et al. in view of Hershey et al. and Payne and further in view of Rickard et al. [U.S. Pat. 5,977,650]. Applicants respectfully traverse the rejection of independent claims 1, 11, 14 and 21 under 35 USC 103(a) as being unpatentable over Ouellette in view of Hershey, as well as the other claim rejections. By the present Response, claims 1-25 will remain pending in the present patent application. Reconsideration and allowance of all pending claims are requested in view of the arguments set forth below.

Rejections under 35 U.S.C. § 103

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole

must suggest the desirability, and thus the obviousness, of making the combination.

Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Applicant respectfully submits that Ouellette and Hershey, alone or in combination, do not teach, disclose or suggest all the features recited in independent claims 1, 11, 14 and 21. Specifically neither reference teaches, discloses or suggests a master controller capable of transmitting GHM signals, or a GHM addressable device coupled between such a master controller and a boundary component, as recited in claims 1 and 14. Moreover, neither reference discloses receiving a GHM signal at a GHM addressable device and establishing a network region in a reconfigurable network based upon interpretation of the GHM signal as recited in claim 10. Similarly, neither reference discloses receiving a signal from a power line, and determining if a dotting portion is present in the signal as recited in claim 21. Accordingly, the combination of the references cannot possibly include these features of the claims, and thus cannot render the claims obvious.

Independent claims 1 and 14, and the claims depending therefrom.

Ouellette discloses a method and an apparatus for computing the electrical power consumption of a load in a power distribution system (col. 4, lines 14-20). The power line communication system in Ouellette includes a central control station 18 that transmits commands to plurality of radio towers preferably via RF signals. The radio tower thereafter broadcast the RF signals to a plurality of nodes (col. 7, lines 8-20). However, there is no disclosure, teaching, or even a suggestion in Ouellette for a power line communication system configured for GHM communication. Certainly the central control station cannot transmit such signals. Hershey fails to obviate this deficiency in the teachings of Ouellette. The mere fact

that Hershey discusses a GHM communication system is not sufficient to supply the GHM transmitting master controller missing from Ouellette. In short, neither reference teaches or suggests such a controller. Moreover, there is no basis whatsoever for entirely altering the nature and operation of the central control station of Ouellette so as to enable the transmission of GHM signals.

Similarly, Ouellette fails to teach an addressable GHM device placed between a master controller and a boundary component as recited in claims 1 and 14. The Examiner acknowledges this point, and appears to argue that Hershey teaches such a device. However, the Examiner's own statement regarding the prior art demonstrates that it is insufficient on this point. The Examiner states only that:

Hershey et al. teach a geometric harmonic modulation (GHM) communication system including an address to identify the recipient or originator of transmitted data. Office action, page 2, section 2.

Even if this were true, it does not establish that either reference teaches or even suggests a GHM device placed as recited in claims 1 and 14 that defines a boundary of a network region. Consequently, the combination of Ouellette and Hershey simply cannot suggest to one skilled in the art all of the recitations of claims 1 and 14.

In view of the forgoing deficiencies in the teachings of the cited art, the Examiner has failed to establish a *prima facie* case of obviousness of claims 1 and 14. These claims, and the claims depending therefrom are therefore believed to be clearly patentable over the cited combination. Their reconsideration and allowance are respectfully requested.

Independent claim 11 and the claims depending therefrom.

Regarding method claim 11, neither Ouellette nor Hershey disclose or suggest at least the step of establishing a network region in a reconfigurable network based on interpretation of a GHM signal. Particularly, neither reference discloses a GHM addressable device defining a boundary of the region based on GHM signals transmitted over a power line. Indeed, the Examiner does not even address these recitations of claim 11 with any specificity at all.

The cursory statements made by the Examiner in rejecting claim 11 simply do not establish a *prima facie* case of obviousness, particularly as no suggestion or motivation whatsoever is provided for completely overhauling the Ouellette system to enable GHM signaling or the functionality set forth in claim 11. Claim 11, and the claims depending therefrom are believed to be clearly patentable over the cited combination, and their reconsideration and allowance are respectfully requested.

Independent claim 21 and the claims depending therefrom.

Finally, the references fail to teach the recitations of independent claim 21. Ouellette fails to teach or suggest at least the steps of receiving signals over a power line, as recited in independent claim 21, or determining if a dotting portion is present in the signal. As such, the reference cannot possibly teach the processing of the signal based upon the presence of the dotting portion as further recited in the claim. Consequently, the Examiner relied upon Hershey for such teachings.

Hershey discloses a digital implementation of GHM system that communicates a binary message denoted by an address of carrier phases. The address may identify a source, a transmitter type, a receiver, or a message type (col. 2, lines 45-50). The dot product unit in Hershey outputs a dot product, which is then compared to a predetermined threshold to make data bit decision, resulting in binary message (col. 7, lines 35-38).

However, the "dot product unit" described in Hershey et al. bears no relation whatsoever to the "dotting portion" recited in the independent claim 21. In the referenced application the dotting portion is a pattern of zeros and ones (such as 10101010...), and is used to process the message contained in the GHM signals only if the dotting portion is present. A "dot product," on the other hand, is a vector operation also referred to as an "inner product" which is no way comparable to the "dotting portion" recited in the claim. In the absence of dotting portion the message is discarded. Neither Hershey nor Ouellette provide any teaching at all on this type of processing.

In light of these deficiencies in the teachings of both references, then, the Examiner has failed to establish a *prima facie* case of obviousness of claim 21. Claim 21 and the claims depending therefrom are therefore believed to be clearly patentable, and their reconsideration and allowance are respectfully requested.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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